DOCUMENT RESUME

ED 152 991 CE 015 214

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TITLE Learning Projects of Adults of Low Literacy Attainment in Jamaica.
PUB DATE Apr 78
NOTE 45p.; Paper presented at the Adult Education Research Conference (San Antonio, Texas, April 5-7, 1978)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Adult Education Programs; *Adult Learning; Adults; Illiteracy; *Illiterate Adults; Interviews; Learning Activities; Learning Characteristics; *Learning Experience; Learning Processes; *Literacy Education; Oral Communication Method
IDENTIFIERS *Jamaica Movement Advancement Adult Learning; *Learning Programs

ABSTRACT

In response to implications raised by earlier research in the field, a study investigated the learning projects (as defined by Allen Tough, 1971) of a group of nonliterate and semiliterate adults in a small community. Brown's Town, Jamaica, was chosen as the area of the study because Jamaica is a Third World nation that has recently initiated a program--the Jamaica Movement for the Advancement of Adult Learning (JAMAL)--to eradicate the nonliteracy of its people, and Brown's Town was considered to reflect certain aspects of Jamaican life that are shared by many of the towns. The population of the study consisted of eighty-six quasi-randomly selected adult students (between the ages of 15 and 72, the average age being 32.7) of the JAMAL program registered as of March 1975. Two-thirds of this sample was male. Occupations represented included manual labor, homemaking, domestic work, trades, full-time school attendance and farming (in which nearly one-quarter of the respondents was engaged). Data were collected by using the "Interview Schedule" (adapted from Tough, 1971, and Coolican, 1973), which consisted of the following sections: demographic information; learning project information; utilization of media; perception of adult education agencies; and learning interests. Among the findings are the following: on the average, each person had undertaken four learning projects during the preceding year; time spent on learning during the year averaged 604.3 hours per person; average length of time spent on a learning project was 142.8 hours per person; learning projects related to a job were most commonly pursued, followed by JAMAL, religious, home/family life subject matter; the JAMAL group leader was one major resource and the individual person (an intimate expert or nonexpert) was the other; and listening and doing were the prominent learning activities. Some implications from the study are these: adults of low literacy spend considerable time pursuing learning; adults of low literacy use oral channels of communication in order to learn, and rely mostly on persons in their immediate social environment; and the learning project approach is useful to program planning. (DTT)

ED152991

LEARNING PROJECTS OF ADULTS OF LOW LITERACY ATTAINMENT IN JAMAICA

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ADULT EDUCATION RESEARCH CONFERENCE

SAN ANTONIO, TEXAS

APRIL 5-7, 1978

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LEARNING PROJECTS OF ADULTS OF LOW LITERACY ATTAINMENT IN JAMAICA[1]

Gordon Brown lives in Orange Tree Valley, a small village in the St. Ann Parish of Jamaica. Gordon is 28 years old, a farmer of yams, vegetables and citrus and a father of four children. He is an active member of his church - he sings in the choir and assists in the administration of church programmes as well as participating in prayer and worship meetings. He is a local leader of the Jamaica Agricultural Society, helping the Society to represent and organize the farmers in the Orange Tree area. Over the past year he spent about 500 hours engaged in deliberate learning activities. He learned new methods of cultivating and fertilizing his crops, how to more effectively take care of his children both physically and psychologically, and Bible Knowledge. He also attended literacy classes three nights a week because Gordon Brown is "illiterate" - he cannot read nor write. But Gordon is an active learner and he is typical of the students who are enrolled in the national literacy programme in his community.[2]

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1. This paper is based on sections of a doctoral dissertation entitled "The Learning Efforts of Jamaican Adults of Low Literacy Attainment" by Jeffrey L. Field. The reader is referred to it for a survey and discussion of the educational systems supporting the learning projects that are described in this paper and for a detailed examination and analysis of the results.

2. Gordon Brown and Orange Tree Valley do not exist. Gordon is a personification of the typical respondent in this study.

Introduction

Nonliteracy is a world problem.

In 1950 about 700 million people, or 44.3 per cent of the world's adult population (15 years and over), were considered nonliterate. In 1960 the UNESCO Office of Statistics estimated that 735 million people, or 39.3 per cent of adults, were nonliterate. Despite persistent efforts on the part of many nations to eradicate nonliteracy, the burgeoning force of population growth has increased the absolute numbers of nonliterates regardless of the percentage decrease. UNESCO's preliminary estimates for 1970 stated that 783 million people or 34.2 per cent of the adult population would be nonliterate (Faure et al., 1973). The trend, therefore, continues.

Nonliteracy is as widespread as it is misunderstood. The Roget's International Thesaures listed illiteracy under the rubric "ignorance". The Webster's New Collegiate Dictionary defined illiteracy as "a mistake or crudity ... made by or typical of one who is illiterate". O. Nigel Bolland (1971) was alarmed about "the association of illiteracy with backwardness that assumes ... values that characterize any illiterate culture as primitive and savage" (p. 30). Harman (1974) suggested that illiteracy is typified by "poverty, disease, malnutrition and, above all, by traditionalism and resistance to change" (p. ix). UNESCO (1965) called illiteracy "a common evil" (p. 25). Such perceptions present an all too negative view of the nonliterate person. A more positive view that appreciates the potential and capacity of the nonliterate is beginning to emerge. UNESCO (1976), eleven years later, concluded that "illiterates often display quite sophisticated behaviour in their own contexts" (p. 118, 119). To receive the nonliterate on

his own terms helps to reduce what UNESCO called the "caricature" view of him.[3]

The Tanzanian Institute of Adult Education (1973) underlines this problem by drawing attention to "the assumption that illiterate people are incapable of learning effectively unless they first become literate" (p. 6). A contrary assumption is that adults learn; adults of all nationalities, social classes, and educational backgrounds learn; adults who are literate, nonliterate and marginally literate learn. The nonliterate or semiliterate person, whether registered in a literacy programme or not, is here considered as a learner who throughout his life increases his skill, knowledge and sensitiveness as a result of deliberate and nondeliberate learning. If he successfully completes a literacy programme, he may continue his learning as a neoliterate. If he does not register in or complete a literacy programme, he can pursue his learning through nonliterate or oral channels.

The task of this paper is to critically examine these perceptions and assumptions by exploring the extent, content, strategies and motivation of deliberate learning of the nonliterate and semiliterate adult in Jamaica. The learning project approach that was developed by Allen Tough (1967, 1968, 1971) was chosen as the conceptual model and investigative tool to facilitate the exploration and explanation of these learning parameters. The objective of this study is to describe the learning projects of a group of nonliterate and semiliterate adults in a small community (Brown's Town) in Jamaica.

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[3] The pronouns "he" and "him" and the adjective "his" are used in the generic sense and refer to both the male and female person.

A learning project is defined by Tough (1971) as

> simply a major, highly deliberate effort to gain certain knowledge and skill (or to change in some other way). Some learning projects are efforts to gain new knowledge, insight or understanding. Others are attempts to improve one's skill or performance, or to change one's attitudes or emotional reactions. Others involve efforts to change one's overt behaviour or to break a habit. (p. 1)

He also offered a more operationally exact definition that has been accepted as the operational definition for this study.[4]

> A learning project ... is here defined as a series of related episodes, adding up to at least seven hours. In each episode, more than half of the person's total motivation is to gain and retain certain fairly clear knowledge and skill, or to produce some other lasting change in himself. (p. 6)

Tough (1971) investigated the learning efforts of seven groups of adults (professors, politicians, lower white-collar men and women, factory workers, teachers and mothers). He found that these adults spent a mean time of 816 hours pursuing a mean of 8.3 learning projects. Approximately two-thirds of their learning projects were self-planned. Tough's investigation used very small samples that were not randomly selected. A number of studies followed, however, that attempted to replicate Tough's findings.

Three studies focused on North American professionals: McCatty (1973) investigated the learning efforts of 54 professionals in engineering, law, education, medicine, architecture, and science; Johns (1973) studied the learning projects of 39 pharmacists from Atlanta, Georgia; Fair (1973) investigated the learning activities of 35 beginning elementary teachers in Toronto and the Regional Municipality of York, Ontario.

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[4] For a detailed explanation of this definition, see Tough (1971).

Two studies centred on particular stages of adult development: Coolican (1973) investigaged the learning projects of 48 mothers from Syracuse, New York, whose oldest child was not yet in school; Hiemstra (1975) studied the learning efforts of 256 older adults (55 years and older) residing in the American state of Nebraska.

Two investigators looked at the learning activities of adults of lower educational attainment: Armstrong (1971) studied the learning projects of 40 adults who had been full time students for the previous year in an academic upgrading programme in a College of Applied Arts and Technology in Metropolitan Toronto; and Johnson (1973) explored the learning efforts of 40 adults who had recently completed the requirements for a high school diploma or a high school equivalency certificate in Fort Lauderdale, Florida.

Peters and Gordon (1974), rather than focusing on a particular subpopulation, studied the learning efforts of a random sample of 426 adults in urban and rural Tennessee. Only one investigation was completed outside North America: Denys (1973) studied the learning projects of 40 teachers and managers in Accra, Ghana. No studies had been done on nonliterate groups. Personal conversations between Allen Tough and the investigator revealed that Tough was confident that his findings (and the findings of the replicators) were widely generalizable, except possibly to one subpopulation, the nonliterate.

The learning project orientation was given international prominence by Faure (1973) who recommended that self-directed learning become an integral part of educational strategy for all nations. This attention was heightened by Roby Kidd (1974) who noted that the concept of self-directed learning

> which may one of the oldest known to man, is only now receiving systematic and serious attention, as a subject of research ... the research carried out thus far, incomplete though it is, seems to justify the following hypotheses:
>
> - o many people, for many purposes, carry out substantial programs of self-directed education and training;
> - o this activity is found among people in all social classes and is probably found in all cultures;
> - o the capacity for self-directed learning can be developed; can be taught;
> - o it seems probable that this capacity can be developed in children at an early age and could be fostered in the elementary school and in many activities for children as well as for youth and adults;
> - o the capacity might become a central objective in organized out-of-school or non-formal activities, functional literacy campaigns and similar programs;
> - o the cost-benefit ratio of studies designed to improve and enhance "self-directed learning" may be extremely favourable.
>
> To the extent that these hypotheses hold to be true in other cultures, it could make a significant difference in the educational strategies that will be employed. A program of instruction that maximized improvement of performance in self-directed learning may turn out to be the most productive education for development as measured in relation to resource investment, and it could result in a radical readjustment of the traditional inputs in education. (p. 37)

The implications raised by Faure and Kidd suggest that more research on self-directed learning was needed, especially on non-North American and non-formally educated groups.[5]

Methodology

Selection of Geographic Area, Population and Sample

Brown's Town, Jamaica, a small market town of 5,479 persons, was selected as the geographic location for the study. Brown's Town is located five miles inland from the North Coast of the Carribean Sea in the Parish of St. Ann.

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5 The term "self-directed learning" is synonymous with "learning project". See Faure (1973).

Jamaica was chosen because it is a Third World nation that had recently initiated a massive literacy programme designed to eradicate the nonliteracy of its people. It is also located within reasonable travelling distance of Canada and offered facilities and support that expedited data collection.

Brown's Town and the six-mile radius surrounding it was selected as representative of significant economic and educational aspects of Jamaican life, such as a bauxite industry, tourism, a large market and banking, retail, agricultural and educational facilities. Furthermore, an Adult Education Centre and the area office for the literacy programme of North West St. Ann are located in the town. The one sector of economic life that is not represented in the area is manufacturing which is located in large towns and cities, especially in Kingston. It should be understood that the area selected for this study does not represent the large towns and cities of Jamaica nor does it represent the other small towns and their surrounding communities. Brown's Town, as is described above, is seen to reflect certain aspects of Jamaican life that are shared with many towns. However, because no attempt has been made to determine the degree to which Brown's Town corresponds to other Jamaican communities, generalization of the results beyond Brown's Town must be very tentative.

The geographical area for study, therefore, lies within the boundaries of Brown's Town and the area included in the six radial miles around the centre of Brown's Town that falls within the constituency of North West St. Ann.

The population of the study is made up of adult students of the JAMAL national literacy program who were registered as of March 1975 and whose classes fell within the geographic area discussed above.[6]

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6 The literacy programme entitled the Jamaica Movement for the Advancement of Adult Literacy is known by its acronym JAMAL.

A sample of 86 students was selected from the population by using the following procedure. A listing of all JAMAL students in the population was obtained from the JAMAL area office in Brown's Town. The listing was made up of a collection of class lists that contained the students' names and addresses, the location of the class and the name of the teacher. The class lists were randomly arranged. Starting with the second person on the listing (the position having been obtained by randomly selecting card two of a series of four cards), every fourth person was selected for the sample. The 86 students selected in this manner are considered quasi-randomly selected.[7]

Approximately one-third of the respondents lived in Brown's Town, with the remaining two-thirds residing in the surrounding villages. Two-thirds of the respondents were male.

The sample ranges in ages from 15 to 72 years: the mean and median ages are 32.7 and 28.1 years respectively. Only four persons reported that they did not have any formal schooling; the mean and median number of years of formal education are 5.9 and 6.3 respectively. A variety of occupations were reported, though almost one-quarter of the respondents were engaged in farming. The other occupations - manual labour, homemaking, domestic work, trades, and full time attendance at school - each represent about ten to fifteen per cent of the sample.

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7 The selection of the sample was completed through a quasi-random process. Though, as described in the text, the first person was randomly chosen, each succeeding person's selection was determined by the person's placement on the class list. However, the names on the class lists as well as the sequence of the lists were not in any order and the number of students on the lists varied from 8 to 49.

The respondents had been attending JAMAL classes for a mean of 56.1 weeks or just over a year. They entered the programme unable to read words but at the time of the interview they were able to read simple sentences.[8]

A typical respondent would be male, living in a village outside Brown's Town, 28 years old, with six years of formal education. He would have entered the JAMAL literacy programme unable to read words or numbers but after one year of classes he would be able to read simple sentences.

Interview

The learning behaviour data were collected by using the "Interview Schedule" which is a semi-structured probing device that was adapted from Tough (1970) and Coolican (1973) and was pretested in October, 1974. The schedule is made up of the following sections:

- demographic information;
- learning project information;
- utilization of media;
- perception of adult education agencies;
- learning interests.

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8 JAMAL classifies its students by the following four levels:

Level 1 - unable to read words or numbers;
Level 2 - can recognize simple words and figures;
Level 3 - can read simple sentences;
Level 4 - able to read fairly fluently but needs help in comprehension and in the use of the English Language and in solving mathematical problems (The National Literacy Board, 1974, p. 6).

This study has added a fifth level that denotes marginal functional literacy at grade four or higher. Definitions of nonliterate, semiliterate and marginally literate as used in this study are:

- o A nonliterate functions at levels 1 and 2;
- o A semiliterate functions at levels 3 and 4;
- o A marginally literate functions at level 5.

Low literacy attainment refers to levels 1 to 5.

Utilizing this classification, the tested median level at the time the respondents entered the JAMAL programme is 1.4 and the median level at which they were functioning at the time of interviewing is 3.0.

Interviews were conducted by the principal investigator and a research assistant from April to July 1975, usually in a JAMAL classroom or in the respondent's home. The data collected by the two interviewers do not differ significantly. Data were analyzed by using the Statistical Package for the Social Sciences (SPSS) computer programme.

General Results

Extent of Learning

This section outlines the extent that learning projects were carried out by the respondents. The extent of learning was measured in terms of the following: the average number of learning projects pursued by the respondents in one year, the average number of hours spent by the respondents on learning projects for one year and the average number of hours spent per project.[9]

Number of Learning Projects. The respondents undertook an average of four learning projects per person during the year preceding the interview. More specifically, they undertook a mean of 4.2 or a median or 4.0 learning projects. The number of learning projects per person varies considerably, from 1 to 9; the standard deviation is 1.8. It is expected that the respondents would undertake at least one learning project because of their involvement in the JAMAL programme. However, as is seen in Table 1, only two persons engaged in only one project; the vast majority (99.7%) undertook two or more. When JAMAL-related learning projects are excluded from the results, the data show that the respondents undertook a mean of 3.2 learning projects (with a standard deviation of 1.8).

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9 Most of the results reported include JAMAL-related learning projects. However, because registration in a JAMAL programme is a criterion of the population description, for certain important results JAMAL-related projects are excluded. JAMAL-related learning projects refer to JAMAL literacy projects and Jamaica School Certificate subjects under the auspices of JAMAL.

TABLE 1

NUMBER OF PERSONS PURSUING LEARNING PROJECTS

No. of Projects Pursued	Frequency	Percent
1	2	2.3
2	14	16.3
3	16	18.6
4	22	25.6
5	11	12.8
6	9	10.5
7	8	9.3
8	3	3.5
9	1	1.2
TOTAL	86	100.0

Number of Hours Learning. A second method of determining the extent of learning is to examine the time respondents used on all their learning projects. They spent a mean of 604.3 hours over the year. In other words, the typical respondent used 1.7 hours each and every day in his efforts to learn. The time spent on learning projects varies considerably, from 44 to 2120 hours per person. The standard deviation is 440.1.

The median time of 500 hours is considerably less than the corresponding mean time which is inflated by some high measures.

When JAMAL-related learning projects are excluded from the results, the data show that respondents spent approximately 226 less hours over the year in learning situations (see Table 2).[10]

10 Though respondents spent considerably less time in learning situations when JAMAL-related projects are excluded from the results, the exclusion produces a time vacuum in the lives of the respondents which could have been filled by other learning projects.

TABLE 2

NUMBER OF HOURS SPENT LEARNING

	Including All Learning Projects	Excluding JAMAL-Related Learning Projects
Mean	604.3	378.2
Median	500.0	-
Standard Deviation	440.1	404.1
Range	44 to 2120	-

Number of Hours on Learning Projects. A third method of determining the extent of learning is to examine the number of hours spent on learning projects over a one-year period. The mean length of time of a learning project is 142.8 hours; again, the median time is considerably less than the mean time which is inflated by some high measures. When JAMAL-related learning projects are excluded from the results, the mean time is also considerably less (see Table 3).

TABLE 3

NUMBER OF HOURS SPENT ON INDIVIDUAL LEARNING PROJECTS

	Including All Learning Projects	Excluding JAMAL-Related Learning Projects
Mean	142.8	117.8
Median	80.0	50.3
Standard Deviation	177.5	172.3
Range	7 to 999	7 to 999

Content of Learning Projects

The content of the 364 learning projects was classified according to categories derived from Johnstone and Rivera (1965) who surveyed adult participation in educational activities in the United States. As is seen in

Table 4, learning projects relating to a job (current or expected) were most commonly pursued. JAMAL, religious and home/family life learning projects were also very popular. Projects focusing on general education, current events and personal development were less popular. Table 4 also outlines the number of persons who pursued at least one learning project in the various content areas. Again, JAMAL, job-related, religious and home/family life projects were the most common.

The wide diversity of learning projects is evident in Table 5 which outlines the specific content of projects for each content area. The table also briefly illustrates the content categories.

The importance of job-related learning is confirmed when respondents were asked to list learning projects that they would like to pursue in the following year. They anticipated that they would continue approximately 87 per cent of their learning projects and commence 200 new projects. Forty-five per cent of these new projects would focus on job-related learning.

Type of Educational Situation

The focus of this study is on the individual and his efforts to learn. Learning, of course, does not take place within a vacuum: it occurs in a specific context. Coombs (1974) differentiates three such contexts by describing three categories of education: informal, formal and non-formal.

TABLE 4

CONTENT OF LEARNING PROJECTS

Content Area	Number of Projects				Number of Persons[a]			
	Including All Projects		Excluding JAMAL-related Projects		Including All Projects		Excluding JAMAL-Related Projects	
Job-Related[b]	26.6	(97)	35.1	(97)	65.1	(56)	65.1	(56)
JAMAL	20.6	(75)	--		80.0	(74)	--	
Religion	17.9	(65)	23.6	(65)	65.1	(56)	65.1	(56)
Home & Family Life	12.9	(47)	17.0	(47)	44.2	(38)	44.2	(38)
Hobbies & Recreation	11.0	(40)	14.5	(40)	36.0	(31)	36.0	(31)
General Education	4.9	(18)	1.8	(5)	17.4	(15)	4.7	(4)
Current Events	2.7	(10)	3.6	(10)	11.6	(10)	11.6	(10)
Personal Development	1.6	(6)	2.2	(6)	7.0	(6)	7.0	(6)
Other	1.6	(6)	2.2	(6)	7.0	(6)	7.0	(6)
TOTAL	100.0	(364)	100.0	(276)				

a $\underline{n}$ = 86 for each content area.

b The job-related category includes agriculture

TABLE 5

SPECIFIC CONTENT OF LEARNING PROJECTS

JOB-RELATED	
Building Trades	
Masonry	18
Carpentry	6
Electrical	3
Steelwork	2
General	1
Agriculture	25
Other Trades	
Mechanics/Driving	13
Cabinet Making	3
Machine Operations & Maintenance	2
Printing	1
Domestic Work	
Gardening	5
Cooking	4
Baking	3
Housekeeping	2
Other	
Crafts	2
Typing	2
Basic School Education	1
Cane Cutting	1
Food Selection	1
Radio-electrical	1
Truck Assistant	1
Safety	1
Sub-Total	97
RELIGIOUS	
Bible Knowledge	42
General Church Activities	13
Choir Practice	6
Church Leadership	4
Sub-Total	65
HOME AND FAMILY LIFE	
Child Care & Human Relations	
Child care	14
PTA	3
Family Planning	1
Improved Family Relations	1
Household Skills	
General	10
Cooking/Foods	5
Budgeting	1
Sewing	1
Home Improvement Skills	
Gardening	7
Carpentry	2
Cabinet Making	1
Decorating Home	1
Sub-Total	47

HOBBIES AND RECREATION	
Sports	
Cricket	12
Combination of sports	3
Bicycle	1
Football	1
Self Defence	1
Crafts	
Carving	3
Crochet/Knitting	3
Handicrafts	2
Antimocassin	1
Straw	1
Arts	
Guitar/Piano	8
Dancing	1
Singing	1
Fixing Motor Cars	2
Sub-Total	40
GENERAL EDUCATION	
Jamaica School Certificate Subjects	13
Schooling	4
Self-planned project	1
Sub-Total	18
CURRENT EVENTS	
PNP Political Meetings	7
American way of life	1
World Crises	1
Law	1
Sub-Total	10
PERSONAL DEVELOPMENT	
Exercise/Weight-Lifting	4
Self-improvement	1
Health	1
Sub-Total	6
OTHER	
Driving	4
Educational Tour	2
Sub-Total	6

> Informal education as used here is the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insight from daily experiences and exposure to the environment - at home, at work, at play; from the example and attitudes of family and friends; from travel, reading newspapers and books; or by listening to the radio or viewing films or television. Generally, informal education is unorganized and often unsystematic; yet it accounts for the great bulk of any person's total lifetime learning - including that of even a highly "schooled" person.
>
> Formal education as used here is, of course, the highly institutionalized, chronologically graded and hierarchically structured "education system", spanning lower primary school and the upper reaches of the university.
>
> Nonformal education as used here is any organized, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular sub-groups in the population, adults as well as children. Thus defined, nonformal education includes, for example, agricultural extension and farmer training programs, adult literacy programs, occupational skill training given outside the formal system, youth clubs with substantial educational purposes, and various community programs of instruction in health, nutrition, family planning, co-operatives, and the like. (p. 8)

The three educational categories are not mutually exclusive: they often overlap each other. Their differences occasionally merge in "hybrid" programmes combining significant features of two or more situations. In the case of this study, "hybrid" refers to the "merger" of nonformal and formal education.

As is seen in Table 6, learning in the informal and nonformal situations accounts for 95 per cent of learning projects. Learning in the formal and hybrid systems entered quite insignificantly in the learning worlds of the respondents. When JAMAL-related learning projects are excluded from the results, the data show that the proportion of learning projects pursued in the informal situation increases.

Table 6 also outlines the number of persons who pursued at least one learning project in the various educational situations. When JAMAL-related projects are excluded from the results, the data show that only slightly more people pursued at least one learning project in the nonformal system than in the informal situation.

TABLE 6

TYPE OF EDUCATIONAL SITUATION

Type of Educational Situation	Number of Projects		Number of Persons[a]	
	Including All Projects	Excluding JAMAL-Related Projects	Including All Projects	Excluding JAMAL-Related Projects
Informal	43.4 (158)	57.2 (158)	69.8 (60)	69.8 (60)
Nonformal	51.6 (188)	40.2 (111)	97.7 (84)	72.3 (63)
Formal	1.9 (7)	2.5 (7)	5.8 (7)	5.8 (5)
Hybrid	3.0 (11)	0	10.5 (9)	0
TOTAL	100 (364)	100 (276)		

a $\underline{n}$ = 86 for each type of educational situation

Planner

The planner is the director of the learning project. Tough (1971) describes the planner as "the person or thing responsible for more than half of the detailed day-to-day planning and deciding in a learning project" (p. 77). He distinguishes among four types:

- group-planner where the leader or the group does the actual planning;
- individual-planner where a person other than the learner is responsible for planning;

- self-planner where the learner himself is responsible for the day-to-day planning;
- non-human-planner where the planner is a material resource, like a programmed instruction book, language lab or television series that provides not only the subject matter of learning but also makes the planning decisions for the learner.

The types of planners used by the respondents in pursuing their learning projects are presented in Table 7.

More than half of the planners used in learning projects were group leaders largely because so many projects focused on classroom literacy training and religion. The individual-planner was used in approximately 25 per cent of the learning projects and the learner himself planned about 20 per cent. The data show that the proportion of group-planned projects decreases when JAMAL-related projects are excluded from the results.

Table 7 also outlines the number of persons who pursued at least one learning project planned by the various types of planners. Again, most respondents used group leaders and other persons as planners, though the data show that the percentage of persons using the group leader decreases when JAMAL-related projects are excluded from the results.

TABLE 7

PLANNER

Type of Planner	Number of Projects: Including All Projects	Number of Projects: Excluding JAMAL-Related Projects	Number of Persons[a]: Including All Projects	Number of Persons[a]: Excluding JAMAL-Related Projects
Group Leader	55.0 (200)	40.9 (113)	98.8 (85)	72.1 (62)
Individual	24.7 (90)	32.2 (89)	60.5 (52)	60.5 (52)
Self	19.8 (72)	26.1 (72)	46.5 (40)	46.5 (40)
Material	0.5 (2)	0.7 (2)	2.3 (2)	2.3 (2)
	100 (364)	100 (276)		

[a] n = 86 for each type of planner

Learning Resources

A learning resource is described by Houle (1972) as "any object, person, or other aspect of the environment which can be used for support or help in an educational activity" (p. 234). A number of resources were used in the learning projects as can be seen in Table 8.

The group leader was used as the major resource in over half of the learning projects because, as was noted above, so many learning projects focused on literacy training and religion. The individual person was the other major resource. (The person could be a friend or relative who is not expert in the accomplishment to be learned (and is here called an intimate nonexpert); or he could be a friend or relative who is expert in the particular accomplishment (and is called an intimate expert); or he could be paid for his service, either directly by the learner or indirectly through his job.)

TABLE 8

LEARNING RESOURCES USED IN LEARNING PROJECTS

Learning Resources	Not Used	Also Used	Mostly Used	
Group				
Instructor	41.2 (150)	7.7 (28)	51.1 (186)	51.1
Self-formed	99.2 (361)	0.8 (3)	0	
Individual				
Intimate Nonexpert	72.8 (265)	15.4 (56)	11.8 (43)	
Intimate Expert	79.9 (290)	1.9 (7)	18.4 (67)	38.7
Paid Expert	89.3 (325)	2.2 (8)	8.5 (31)	
Print Media				
Books	39.6 (144)	52.5 (192)	8.0 (28)	
Magazines	85.2 (310)	14.8 (54)	0	8.5
Newspapers	71.2 (259)	28.3 (103)	0.5 (2)	
Electronic Media				
Television	90.4 (329)	9.1 (33)	0.5 (2)	
Radio	62.1 (226)	37.4 (136)	0.5 (2)	1.0
Film	88.2 (321)	11.8 (43)	0	
Tape	91.2 (332)	8.8 (32)	0	
Exhibitions	97.3 (354)	2.7 (10)	0	
Correspondence	98.6 (359)	1.4 (5)	0	0.8
Other Resources	99.5 (362)	0	0.5 (2)	
Could Not Determine	99.7 (363)	0	0.3 (1)	
				100.0

Other learning resources, especially the print and economic media, were "also used" by learners; however, they were not perceived as major sources of learning. Newspapers were widely available and were consulted by the respondents but, probably because of the respondents' limited literacy skills, they were not used as a major learning resource. Newspapers were more frequently used as a supplementary resource in JAMAL learning projects. Books were also used as a supplementary resource in literacy and general educational projects. Magazines, being too expensive for most JAMAL students to buy, were not frequently used, except when supplied by JAMAL or distributed through church organizations.

Over 90 per cent of the respondents had immediate access to radio and about 25 per cent had access to television. However, as was the case with print media, these resources were not considered major and were only used supplementarily. Radio, of course, was more frequently utilized. Films and tapes, when used, were usually employed in a group setting, such as at a church meeting or in a school classroom.

To give the reader a clearer impression of how learning resources were used, the following examples are given for a number of content areas:

JAMAL:

- A middle-aged woman learned basic literacy skills, budgeting, farming and basic science information from a volunteer teacher in a JAMAL literacy class that met twice weekly in a church building in a village outside Brown's Town.

JOB-RELATED:

- A young man in his teens learned masonry and carpentry skills with a group of other young men under the direction of a skilled tradesman at a Youth Pioneer Training Centre at Addison Park in Brown's Town by building a cement block wall around the park. He also learned masonry from his uncle.

- A young man learned from his friend how to make a push-cart so that he could carry his goods to sell ice cream on the streets of Brown's Town.

- A young man learned cooking and table-setting from the cook at a tourist villa on the North Coast.

- A young woman learned how to teach more effectively at an ongoing workshop for basic school teachers organized and led by teachers of the Brown's Town Model Basic School.

RELIGION:

- A middle-aged woman learned Bible Knowledge at her Bible class on Tuesday evenings and at service on Sundays. She also read the Bible at home and listened to Bible and religious programmes on the radio.

- A young woman of 30 years learned church hymns and how to improve her singing at choir practice each week from the choir master.

HOME AND FAMILY LIFE:

- A young man tried to improve personal relationships in his family of four children by discussing child care and human relations with his friends and relatives.

- A young man learned cooking and sewing from his mother.

- A middle-aged woman learned house craft skills (boning chicken, making beds, sewing, baking, and farming) from Home Economists at the Agriculture Training Centre in Spanish Town in a course organized by the Ministry of Agriculture.

HOBBIES AND RECREATION:

- A man of 29 years learned how to improve his game of cricket by participating in a local cricket club that used land on a nearby estate. He learned mostly from his friends though he also learned about cricket rules and strategy from the radio and newspaper.

- A woman of 30 years learned to play the piano from a private teacher she paid.

- A young woman learned to crochet at home from her grandmother so that she could make her own gifts.

AGRICULTURE:

- A man of 40 years learned from a land authority officer how to fertilize his coffee plants.

- A young man learned from his father tilling, planting, fertilizing, weeding, digging and cutting yam sticks on the family farm about five miles from the family home.

GENERAL EDUCATION:

- A young man of 18 years learned Mathematics, English, Bible Knowledge and Civics (all of which he considered as one learning project) for his Jamaica School Certificate at the Brown's Town Day Centre. He learned with a group of people of varying literacy levels under the direction of a paid JAMAL teacher.

CURRENT EVENTS:

- A middle-aged woman who attended political meeting each month organized by the primary school teacher learned through discussion about currently important political, social and economic events. She also read pamphlets prepared by the political party, newspapers, and magazines and listened to political programmes on the radio.

PERSONAL DEVELOPMENT:

- A young man learned weight-lifting with his fellow workers at his place of work from a friend who dropped in at the end of a work day.

Learning Activities

Learning activities refer to what the person does while learning. He may listen, converse, watch, read, practise or solve problems. As can be seen in Table 9, the learners reported that practising a new learning was the most common type of learning activity. Listening was also a common major activity. Listening denotes one-way communication, usually from a teacher to a student, which is contrasted to conversation that denotes two-way communication, between two or among many persons. The other activities were not as prominent, but as Table 9 shows, they were more common as minor activities (reported under the "also used" heading).

TABLE 9

LEARNING ACTIVITIES IN LEARNING PROJECTS

Learning Activity	Not Used	Also Used	Mostly Used
Practising	21.7 (79)	28.6 (104)	49.7 (181)
Listening	32.4 (118)	39.3 (144)	28.3 (102)
Reading	36.5 (133)	53.0 (193)	10.4 (38)
Watching	17.0 (62)	75.8 (276)	7.1 (26)
Conversation	11.5 (42)	84.3 (307)	4.1 (15)
Problem Solving [a]	63.7 (232)	35.2 (128)	0.5 (2)

[a] two cases missing

Session Time

The respondents were asked to report the number of hours in a day that they spent on a learning project. The number of hours need not be continuous as they could be interrupted by meals or breaks. Table 10 shows that the time spent varies considerably from less than 30 minutes to more than nine hours. The median time of a learning session is two hours and seventeen minutes.

TABLE 10

LEARNING PROJECT SESSION TIME

Session Time	Frequency	Percent
0-30 min.	60	16.5
31-59 min.	48	13.2
60 min.-2 hr. 59 min.	113	31.0
3-4 hr.	91	25.0
5-6 hr.	12	3.3
7-8 hr.	15	4.1
9-10 hr.	25	6.9
TOTAL	364	100

Financial Costs

Learners often must pay for goods and services while pursuing learning projects. Table 11 outlines financial costs that were reported by the respondents as being directly related to learning projects.

TABLE 11

BREAKDOWN OF COSTS INCURRED BY RESPONDENTS

Category	Mean	Standard Deviation
Travelling	0.75	6.4
Supplies/Resources	1.44	4.3
Course(s)	1.19	7.9
Other	0.37	5.2
TOTAL	$3.73	14.4

Though the mean total cost of learning projects incurred by the respondent is $3.73 per project, no costs were incurred for 64 per cent of the projects.

Location of Learning

A church building was the most common location of learning. It could be a large and modern building in Brown's Town, a small cement structure in a village or a very modest "hut" type building. Other prominent locations were the school, the home and place of work. As can be seen in Table 12, basic and primary schools were more extensively used than secondary schools and the Adult Education Centre because they are more numerous and therefore more accessible to persons living in the villages. The residence of the learner were also extensively used as a secondary place of learning.

TABLE 12

LOCATION OF LEARNING PROJECTS AND DISTANCE TO MAIN LEARNING LOCATION

Location	Not Used	Also Used	Mostly Used	Distance to Main Learning Location (in miles) Mean	Std. Dev.
Church	67.3 (245)	5.8 (21)	26.9 (98)	0.7	0.7
Residence					
Learner	43.1 (157)	42.6 (155)	14.3 (52)	0	0
Friend/Relative	86.0 (313)	8.2 (30)	5.8 (21)	0.8	1.8
Place of Work	78.0 (284)	1.9 (7)	20.1 (73)	3.3	7.5
School					
Basic	91.5 (333)	1.4 (5)	7.1 (26)	2.8	11.8
Primary	90.9 (331)	1.4 (5)	7.7 (28)	2.0	2.9
Secondary	98.7 (356)	0.8 (3)	1.4 (5)	1.2	0.5
Adult Education Centre	95.9 (349)	0.3 (1)	3.8 (14)	1.2	1.4
Recreation Centre	92.9 (338)	1.1 (4)	6.0 (22)	0.6	0.5
Other Location [a]	91.8 (334)	1.9 (7)	5.8 (21)	1.8	3.4
Government Building	96.7 (352)	2.2 (8)	1.1 (4)	2.5	2.4
Market/Shop	99.5 (362)	0.5 (2)	0	-	-
Library	99.5 (362)	0.5 (2)	0	-	-

[a] 2 cases missing

The intereviewees travelled a mean distance of 1.5 miles, usually on foot, from their primary residence to the major location of learning. About 50 per cent, however, travelled less than half a mile.

The respondents travelled farthest when their place of work was used as the main location of their learning projects and least, in fact not at all, when their own residence was used. As Table 12 indicates, the respondents travelled less distance to secondary schools and the Adult Education Centre than to primary and basic schools. Though primary and basic schools are distributed throughout the geographical area of this study, they were used by respondents who lived in the outlying villages and who, therefore, had to travel some distance to reach them. The secondary shcools and Adult Education Centre are located in Brown's Town and were more accessable to respondents living in the town.

Reasons for Beginning Learning Projects

The respondents mentioned a variety of major reasons for beginning learning projects as is indicated in Table 13. Approximately 50 per cent of learning projects were undertaken to "apply [them] directly in order to do something, accomplish something, produce something, or decide something," (Tough, 1968, p. 19): this is described under the rubric "to take action." Examples of such learning efforts are to improve cricket playing skills, to repair an engine, to write a letter and to sew a dress. Approximately 18 per cent of learning projects were undertaken because the learner intended to gain financially and/or to receive a promotion. Only eight per cent of learning projects were initiated to obtain knowledge per se without intending to take

TABLE 13

REASONS FOR BEGINNING LEARNING PROJECTS

Reason	Not Given	Also Given	Most Important Reason
To take action	32.1 (117)	18.1 (66)	49.7 (181)
Financial gain/promotion	69.8 (254)	12.1 (44)	18.1 (66)
To obtain knowledge	76.9 (280)	14.8 (54)	8.2 (30)
Enjoyment from practising skill	87.6 (319)	4.1 (15)	8.2 (30)
To understand/increase sensitivity	88.5 (322)	5.5 (20)	6.0 (22)
To teach/help others	87.4 (318)	8.2 (30)	4.4 (16)
Examination/credit/certification	95.6 (348)	1.9 (7)	2.5 (9)
Emjoyment from learning	97.5 (355)	1.1 (4)	1.4 (5)
Spend time more effectively	99.2 (361)	0.3 (1)	0.5 (2)
Other reason	99.5 (362)	0	0.5 (2)
Future learning	99.2 (361)	0.5 (2)	0.3 (1)
Puzzlement/curiosity/question	100.0 (364)	0	0
Someone noticing learning	100.0 (364)	0	0
Meet new/interesting people	100.0 (364)	0	0
Change/away from routine	100.0 (364)	0	0
Relaxing	100.0 (364)	0	0
Cannot indicate	100.0 (364)	0	0

action and only six per cent were initiated in order to understand or increase sensitivity. Eight per cent of learning projects were begun because the learner enjoyed "performing the activity in which he is trying to improve his skill" (Tough, 1968, p. 37). For example, the person learned to improve his football skills because he enjoyed playing the game. Less than two per cent of learning projects were initiated because the learner enjoyed the actual learning process. Tough (1968) defines this enjoyment: the person "feels pleased that he is learning at this particular time instead of engaging in some other activity" (p. 39). The respondents perceived that few learning projects were undertaken to teach or help others, for examination, credit or certification, to spend time more effectively, or as a basis for a future learning project. Table 13 also indicates a number of other reasons that were not mentioned at all by the respondents.

Problems Encountered in Learning Projects

The respondents were asked to indicate the problems they encountered while pursuing learning projects. As is shown in Table 14, they perceived they they had at least one problem in 70 per cent of their projects. They felt that their greatest problem was a lack, in terms of quality and quantity, of learning resources; the respondents indicated that about 25 per cent of learning projects would have benefited from more and better quality human and material resources. Their second problem was limited time: the respondents stated that for about 17 per cent of learning projects other responsibilities, especially vocational and family responsibilities, demanded time that was difficult to give to learning. The respondents felt that fatigue (usually caused by working) was a problem for about six per cent of learning projects. Other problems were not mentioned as frequently.

TABLE 14

PERCEIVED PROBLEMS IN LEARNING PROJECTS

Problem	Not a Problem	Also A Problem	Greatest Problem
Limited Learning Resources	51.4 (187)	23.9 (87)	24.7 (90)
Limited Time/Other Obligations	73.6 (268)	9.1 (33)	17.3 (63)
Limited Energy	81.0 (295)	13.2 (48)	5.8 (21)
Other Peoples' Negative Attitudes	91.2 (332)	3.8 (14)	4.9 (18)
Limited Ability	92.9 (338)	2.7 (10)	4.4 (16)
Limited Transportation	91.8 (334)	4.1 (15)	4.1 (15)
Limited Money	93.1 (339)	2.7 (10)	4.1 (15)
Lack of Companion	88.7 (323)	9.1 (33)	2.2 (8)
Changing/Decreasing Interests	95.6 (348)	3.3 (12)	1.1 (4)
Other Problems	99.2 (361)	0	0.8 (3)
Benefits Overestimated	99.2 (361)	0.8 (3)	0
No Problems	69.5 (253)	0	30.5 (111)

Perception and Use of Adult Educational Agencies

Respondents were asked: "We have been talking about adult learning. Could you please tell me where adults may learn in Brown's Town: in what places, from what people and from what things do adults learn?" Most respondents had much difficulty in answering this question which often had to be repeated. A common initial answer was "I don't know." Only with extensive clarification did the respondents begin to list some agencies. They did not seem to be able to perceive that most of the adult educational agencies were giving educational services.

Most of the adult education agencies listed in Table 15 were neither used nor listed by the respondent.[11] Some agencies, schools in particular, were perceived (that is, listed) as adult educational but were not used. Other agencies, the Adult Education Centre (JAMAL), electronic media and the newspaper in particular, were used by the respondent but not listed. The church and industry were both perceived and used as educational agencies by many respondents.

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11 Agencies were considered used if they were reported as used when respondents described their learning projects.

TABLE 15

PERCEPTION AND USE OF ADULT EDUCATIONAL AGENCIES

Type	Did Not List Nor Use	Listed But Did Not Use	Used But Did Not List	Listed and Used
Church	25.6 (22)	8.1 (7)	26.7 (23)	39.5 (34)
Adult Education Centre (JAMAL)	0	0	73.3 (63)	26.7 (23)
Industry (on-the-job training)	46.5 (40)	23.3 (20)	5.8 (5)	24.4 (21)
Schools	33.7 (29)	52.3 (45)	2.3 (2)	11.6 (10)
Recreation (Park)	77.9 (67)	9.3 (8)	5.8 (5)	7.0 (6)
Electronic Media	11.6 (10)	4.7 (4)	80.2 (69)	3.5 (3)
Health Agency	81.4 (70)	8.1 (7)	7.0 (6)	3.5 (3)
Newspaper	32.6 (28)	2.3 (2)	62.8 (54)	2.3 (2)
Cinema	89.5 (77)	5.8 (5)	2.3 (2)	2.3 (2)
Other	88.4 (76)	7.0 (6)	2.3 (2)	2.3 (2)
Government	84.9 (73)	7.0 (6)	8.1 (7)	0
Agricultural Agency	90.7 (78)	3.5 (3)	5.8 (5)	0
Library	91.9 (79)	4.7 (4)	3.5 (3)	0
D.E.M.S., U.W.I.	93.0 (80)	7.0 (6)	0	0
Business School	97.7 (84)	2.3 (2)	0	0
Correspondence	100.0 (86)	0	0	0

Implications of the Study

- Adults of low literacy attainment spend a considerable amount of time pursuing learning.[12] To be exact, the respondents in this study spent a mean of 604.3 hours per person on learning projects over a 12-month period. In other words, they spent 100 minutes each and every day of the year in learning efforts, a considerable achievement for a people who are supposed to have "less human value than that of the literate" (UNESCO, 1976, p. 118).

One of the outcomes of the Experimental World Literacy Programme is the enhanced reputation of the capabilities of the nonliterate. A. Meister (reported in UNESCO, 1976, p. 119) indicated that "the image of the adult illiterate has emerged enriched." Though comparisons with literate populations must be tentative, the number of hours that the adults in Brown's Town spent in deliberate learning activities do not markedly deviate from the results obtained in studies on North American and African literate adults (see Field, 1977, p. 17).

- Adults of low literacy attainment use oral channels of communication in order to learn. As was noted before, the Institute of Adult Education (1973) in Tanzania is concerned about the prevalence of the contracy assumption: "illiterate people are incapable of learning effectively unless they first become literate" (p. 6). The Institute argues that

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12 The reader is reminded that the population of this study is made up of adult students who were registered in the JAMAL literacy programme.

> the fact that the person cannot read and write does not prevent him from learning. We know that most people in the rural areas are illiterate, and have not had primary education. If we wait until all adults are literate before providing adult education for them, any effort to effectively stimulate rural development will be severely limited. And, in any case, even if the people become literate, they have to be taught many other things in order to improve their standard of living. (p. 7)

Eric Havelock (1976), in Origins of Western Literacy, carries the argument further by stating

> that the view is encouraged that non-literate socities are somehow barbarian, crude or primitive, thus denying cultural significance to oral cultures - cultures that is, of the spoken word - which in effect are regarded as non-cultures. Even the Greek example, confined though it is within narrow historical limits, is sufficient to show how false this is. The Greeks between say 1100 and 700 B.C. were totally non-literate: the evidence of epigraphy on this point is now irrefutable. Yet it was precisely in these centuries that Greece invented the first form of that social organization and artistic achievement which became her glory. (p. 4)

He adds that

> a conception which identifies cultural sophistication with a degree of literacy must be discarded. A culture can somehow rely totally on oral communication and still be a culture.
>
> The Greek experience ... is only a typical fragment of an immense history of human culture which extends backwards for uncounted millennia. From the standpoint of human evolution a perspective on the "orality", if I may use the term, of the human animal requires us to recognize that oral language is fundamental to our species, whereas reading and writing wear the appearance of a recent accident. It is a curious kind of cultural arrogance which presumes to identify human intelligence with literacy. It won't do to assume, for example, that the Athenian democracy had to be literate in order to function. One would have thought that even the example of modern India would have disposed of this presumption. (p. 6)

Persons of nonliterate cultures communicate through a fundamental channel, the oral channel, which can and should be used as a basic medium for learning. The educational planner of organized learning of adults of low literacy attainment must come to grips with the concept of "orality". The oral channel, as used by the respondents in this study, will now be considered.

Two learning situations are considered typical:

- Group learning: where the learner listens to an orator, for example, his minister.
- One-to-one learning: where the learner listens and discusses with another person, for example, a friend or supervisor at work.

In fact, the group leader or the individual person was used as the primary learning resource in approximately 90 per cent of all learning projects. In contrast, books and other print resources were mostly used for learning purposes in only about nine percent of learning projects. The respondents also reported that listening was a channel of communication in approximately two-thirds of the projects and conversation was a channel in about 90 per cent of projects. Though the effectiveness of learning by using these channels and resources was not measured, the respondents demonstrated through their efforts to learn that "orality" was a necessary and, when coupled with observation and practice, sufficient means to learning.

Many respondents reported that they attended the literacy programme because it was the major and perhaps only (other than the church) adult educational institution located in their community. They, however, did not often place high priority on literacy learning. Other goals, especially vocational, were perceived as more important. But the respondents hoped that literacy attainment would allow them to directly or indirectly meet these goals. This situation is, perhaps, partially due to JAMAL that is set up to "improve the [person's] education to a standard where [he] can enter other educational and vocational skill-training institutions" (The National Literacy Board, 1974, p. 1). It is the opinion of the investigator of this study that such arrangements are appropriate for certain people, especially young people, but many persons do not have the motivation, persistence, time, energy and/or ability to successfully complete a literacy programme. They need to directly and immediately satisfy their learning needs without the intervening literacy variable. Kassan (1975) reports the experience of the functional literacy programme in Tanzania:

> Although the literacy performance was poor, the evaluation of the Project came up with a most interesting finding, namely, that participants tended to do better on vocational skills even with low performance on literacy. (p. 5)

And so, even when literacy is tied to more primary learning needs, it is often not successfully learned unless it itself is the primary need. The Second Five Year Development Plan in Tanzania (reported in Institute of Adult Education, 1973) stated the situation well when it advocated that "literacy will be included [in rural development adult educational programmes] only in response to popular demand, as people become aware of its functional importance" (p. 7). The respondents in this study could and most likely

would attend organized learning programmes that would emphasize "orality" and successfully complete such programs so as to satisfy their immediate and long range learning needs; only those persons who perceive the functional importance of literacy would extend their channels of communication to include literacy.

Alan Thomas (1976) broadened the definition of functional literacy from its reading and writing base to mean "the liberation and extension of four languages as part of the ordinary talents of human beings" (p. 11). He illustrated the [four] languages:

- reading and writing - the command of print which provides access to all those things with which we are exquisitely familiar, but in my opinion [have] less importance with every day that passes.
- mathematics - the language of measurement, of precise observation, and therefore of science. As close to a universal language as we have.
- music and oral speech - the language of human conversation, of domestic life, of radio, public speaking or oratory, (rhetoric, it used to be called, when it claimed a very large part of the pre-print curriculum) and of film and television.
- visuals, graphic design and dance - the language of movement, film, television and the rest. (pp. 10, 11)

Planners of educational programmes of persons of low literacy attainment should be cognizant of these four languages, especially the third and fourth, and utilize the language or languages which would be facilitative to the particular learners involved.

- The results suggest that there is little difference in learning styles between the nonliterate and semiliterate adult.[13] The only major

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[13] There were two demographic differences between the two groups: The semiliterate and literate adult was more likely to be living in Brown's Town and was more educated that the nonliterate.

difference is that semiliterate and marginally literate adults spent more hours on learning projects than nonliterates (690.1 versus 466.7). The learning projects of both groups had almost the same content, and were organized by the same types of planner in the same kinds of educational situations. They also used the same types of learning resources; the semiliterates/marginally literates did not use books, magazines, newspapers and media any more frequently than the nonliterates. Newly acquired literacy, therefore, does not appear to be readily used as a major aid to deliberate learning.

- Adults of low literacy attainment learn mostly from persons in their immediate social environment.

Though the respondents undertook most of their learning projects in the nonformal educational system, most nonformal agencies - like health, agricultural and other government agencies as well as libraries - were not extensively used for learning purposes. Only JAMAL and the Church were widely used.

The respondents' reliance on persons in their own social environment becomes apparent when JAMAL-related learning projects are excluded from the results; it was found that the majority of learning projects were undertaken in the informal learning situation. These learning projects were

- planned by the learner himself or by another person who was immediately available;
- aided by friends, relatives, co-workers and supervisors who acted as learning resources and who were again immediately available;
- located at home or at a place of work.

Field (1977), after surveying the informal, nonformal and formal educational agencies serving the respondents, concluded that there is some question as to whether the agencies are adequately delivering their services to and are functionally being used by adults of low literacy attainment.[14] Despite the foregoing, the respondents seem to have made good progress in their efforts to learn. They clearly demonstrated their adaptability to versatile learning by learning in both the nonformal and informal situations and by using a number of different types of planners and resources in a number of different content areas. As was discussed above, they used resources, usually people, that were available to them. But when describing problems that were encountered in their learning proejcts, they indicated that they would like more numerous and more expert resources than that which were readily available. Such help might be located in any or all of the three educational situations. What is needed is a situation that conforms both to the respondents' learning needs and styles and to educational agencies' delivery capabilities.

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14 See Field (1977) for a description of the educational agencies serving Brown's Town and area in the informal, nonformal and formal educational situations.

Community centres could serve such a need. They could also serve medical, cultural, social, recreational and other needs. They could be located, wherever possible, in existing buildings in urban and rural areas throughout the island and could be administered by the community college in the nearest urban centre. In North West St. Ann, for example, the Brown's Town Community College could be responsible for co-ordinating the educational delivery of educational agencies in community centres according to the needs of the community. Existing educational agencies serving Brown's Town and area include:

- basic and infant schools;
- primary and secondary schools;
- evening schools associated with secondary schools;
- Jamaica Agricultural Society organizational and informational programmes;
- Ministry of Agriculture extension activities;
- youth clubs
- National Youth Service;
- Pioneer Corps;
- 4-H Clubs;
- Community Development Agency;
- Jamaican Library Service;
- health and family planning educational programmes;
- industrial training programmes;
- church programmes;
- JAMAL.

Especially in the small community, co-ordinating formal educational, nonformal educational, religious, recreational and government programmes in one centre would not only improve the efficiency of programme delivery but would also supply a readily identifiable and available centre in the community that is devoted to community education and development. It would also reduce needless duplication of buildings and learning resources and encourage a more equitable distribution of resources between the formal and nonformal systems. It would also encourage additional programmes that would utilize under-used existing resources. For example, radio could be used in radio study groups.

- The learning project approach is a useful model for programme planning. Not only is the learning project approach a useful device for investigating adult learning, it is also useful for two important elements of programme planning: need and format identification.

Adult educators usually survey their clientele to find out what they want to learn and how they want to learn. However, most students have difficulty in perceiving and articulating their learning needs and preferred methods of learning. Often they report the obvious or what they think the educator wants to hear. The learning project approach offers a unique solution to this problem by focussing on what the learner has actually learned. The adult educator could, therefore, more easily "listen" to students by examining their actual learning efforts. He could provide learning resources and help that would facilitate learning in a format that would be an extension of the students' projects. The learning efforts of the near past, therefore, could become a guide to need and format identification of the near future.

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